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Understanding the nature and scale of low-intake dehydration on ‘Medicine for Older People’ wards at University Hospital Southampton: A mixed-methods study

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Dehydration during hospital stays is a significant concern, particularly affecting older adults⁽¹⁾. The ageing process associated with pathological changes and conditions such as dementia makes older adults especially vulnerable to both chronic and acute dehydration^(1,2). Recent studies indicate that conventional signs and symptoms of low-intake dehydration may not consistently indicate its presence in older inpatients, leading to missed or incorrect assessments. It can result in significant morbidity through falls, constipation, delirium, respiratory and urinary tract disorders, and even death^(2,3). Diagnosing low-intake dehydration at the early stage is challenging, leading to treatment delays which further compound the negative consequences of dehydration^(1,3). There is a need to determine the scope and practice of detecting and managing low-intake dehydration in ‘Medicine for Older People’ (MOP) wards at University Hospital Southampton (UHS). The primary aim of this study was to explore the current practices and challenges in detecting and managing low-intake dehydration in older inpatients within the MOP wards at UHS.

Using a sequential, explanatory mixed-method design, a prospective chart review study (phase 1) was conducted at all the MOP wards at UHS over one month. The study included 50 adults aged 65 and above admitted to the medical wards for various reasons and now deemed ‘Medically Optimised for Discharge’ (MOFD). The quantitative aspect involved reviewing the completion of a local hydration assessment tool and the proper documentation of hydration and fluid balance charts for at-risk patients. The qualitative component (phase 2) consisted of semi-structured interviews with 10 participants—four doctors and six nurses with years of experience ranging from 4 to 12 years—to understand the perceptions of hospital staff on hydration care, its barriers and facilitators.

The quantitative phase found that all patients were at risk for dehydration and underwent assessment through the hydration risk assessment, with hydration chart reviews during early, late, and night shifts. 20% did not have hydration assessment within 24h of admission and there were some missing reviews during various shifts. Most 24-hour fluid balance sheets were not completed for patients in the red category (start 24-hour fluid balance chart). Qualitative findings revealed that staff had ‘(1) experiential knowledge of hydration understanding the risks of dehydration in older adults’, ‘(2) difficulty in dehydration assessment and diagnosis due to resources’ and ‘(3) challenges related to staff levels and skills’ as well as (4) patient attributes contributing to difficulty in dehydration assessment.

The mixed-methods study underscores the importance of addressing low-intake dehydration in older inpatients on MOP wards and highlights gaps in current practices. The findings emphasise the need for improved training, awareness, and standardised protocols to prioritise hydration care among healthcare professionals and provide optimal hydration care for older inpatients.

References

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